

ABSTRACT OF THE DISCLOSURE

A formulation containing a copolymer derived from a cationic monomer effectively inhibits and controls the formation of inorganic scales. The formulation has particular application in the removal of zinc sulfide and iron sulfide scales formed when
5 zinc bromide brines are used as completion fluids. The copolymer exhibit high solubility in high-density brines, such as zinc bromide brines. The polymers may be introduced into an oil or gas well as a portion of a carrier fluid or with brine. The preferred copolymer for use in the invention contains an acrylamide unit and a diallyldimethylammonium salt and, optionally, an acrylic acid or a salt thereof. The weight average molecular weight of
10 such inhibitor copolymers is generally between from about 500,000 to about 5,000,000.